

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. 2003-NE-06-AD; Amendment 39-13112; AD 2003-08-01]

RIN 2120-AA64

Airworthiness Directives; Rolls-Royce Deutschland Ltd. & Co KG, Model Tay 650-15 Turbofan Engines

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule; request for comments.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for certain serial numbers (SNs) of Rolls-Royce Deutschland Ltd. & Co KG (RRD) Model Tay 650-15 turbofan engines. This action requires initial and repetitive visual inspections of low pressure (LP) turbine stage 2 rotor discs and LP turbine stage 3 rotor discs on certain SNs of engines, for corrosion. This AD is prompted by reports of excessive corrosion found during disc inspection. The actions specified in this AD are intended to prevent uncontained LP turbine stage 2 rotor disc or LP turbine stage 3 rotor disc failure due to excessive corrosion, and damage to the airplane.

DATES: Effective May 20, 2003.

We must receive any comments on this AD by June 16, 2003.

ADDRESSES: Use one of the following addresses to submit comments on this AD:

- By mail: The Federal Aviation Administration (FAA), New England Region, Office of the Regional Counsel, Attention: Rules Docket No. 2003-NE-06-AD, 12 New England Executive Park, Burlington, MA 01803-5299.
- By fax: (781) 238-7055.
- By e-mail: 9-ane-adcomment@faa.gov

You may get the service information referenced in this AD from Rolls-Royce Deutschland Ltd & Co KG, Eschenweg 11, D-15827 Dahlewitz, Germany, telephone +49 (0) 33-7086-1768; fax +49 (0) 33-7086-3356.

You may examine the AD docket, by appointment, at the FAA, New England Region, Office of the Regional Counsel, 12 New England Executive Park, Burlington, MA.

FOR FURTHER INFORMATION CONTACT: James Lawrence, Aerospace Engineer, Engine Certification Office, FAA, Engine and Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803-5299; telephone (781) 238-7176; fax (781) 238-7199.

SUPPLEMENTARY INFORMATION: The Luftfahrt-Bundesamt (LBA), which is the airworthiness authority for Germany, recently notified the FAA that an unsafe condition may exist on certain SNs of RRD Model Tay 650-15 turbofan engines. The LBA advises that the LP turbine stage 2 rotor discs and LP turbine stage 3 rotor discs of seventeen Tay 650-15 turbofan engines have been found to have excessive corrosion. RRD has determined that this excessive corrosion is the result of the specific environment in which these engines operate. This AD requires initial and repetitive visual inspections for corrosion of low pressure (LP) turbine stage 2 rotor discs and LP turbine stage 3 rotor discs on certain SNs of engines. Because disc deterioration may already have begun, repetitive inspections are also required if any affected disc is removed from the corrosive environment and put in service in a noncorrosive environment. The actions specified in this AD are intended to prevent uncontained LP turbine stage 2 rotor disc or LP turbine stage 3 rotor disc failure due to excessive corrosion, and damage to the airplane.

Relevant Service Information

The LBA issued AD 2002-287, dated October 17, 2002, in order to assure the airworthiness of these RRD Model Tay 650-15 turbofan engines in Germany.

FAA's Determination and Requirements of This AD

Although none of these affected disc SNs are used on any airplanes that are registered in the United States, the possibility exists that these disc SNs could be installed into engines used on airplanes that are registered in the United States in the future. Since an unsafe condition has been identified that is likely to exist or develop on other RRD Tay 650-15 turbofan engines of the same type design, this AD is being issued to prevent uncontained LP turbine stage 2 rotor disc or LP turbine stage 3 rotor disc failure due to excessive corrosion, and damage to the airplane. For engine SNs 17251, 17255, 17256, 17273, 17275, 17280, 17281, 17282, 17300, 17301, 17327, 17332, 17365, 17393, 17437, 17563, and 17618, this AD requires initial and repetitive visual inspections of LP turbine stage 2 rotor discs and LP turbine stage 3 rotor discs for corrosion.

Bilateral Airworthiness Agreement

This engine model is manufactured in Germany, and is type certificated for operation in the United States under the provisions of § 21.29 of the Federal Aviation Regulations (14 CFR 21.29) and the applicable bilateral airworthiness agreement. Pursuant to this bilateral airworthiness agreement, the LBA has kept the FAA informed of the situation described above. The FAA has examined the findings of the LBA, reviewed all available information, and determined that AD action is necessary for products of this type design that are certificated for operation in the United States.

Immediate Adoption of This AD

Since none of these affected engine SNs are used on any airplanes that are registered in the United States, notice and opportunity for prior public comment are unnecessary. Therefore, a situation exists that allows the immediate adoption of this regulation.

Changes to 14 CFR Part 39—Effect on the AD

On July 10, 2002, we issued a new version of 14 CFR part 39 (67 FR 47997, July 22, 2002), which governs our AD system. This regulation now includes material that relates to special flight permits, alternative methods of compliance, and altered products. This material previously was included in each individual AD. Since this material is included in 14 CFR part 39, we will not include it in future AD actions.

Comments Invited

This AD is a final rule that involves requirements affecting flight safety and was not preceded by notice and an opportunity for public comment; however, we invite you to submit any written relevant data, views, or arguments regarding this AD. Send your comments to an address listed under ADDRESSES. Include "AD Docket No. 2003-NE-06-AD" in the subject line of your comments. If you want us to acknowledge receipt of your mailed comments, send us a self-addressed, stamped postcard with the docket number written on it; we will date-stamp your postcard and mail it back to you. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of the rule that might suggest a need to modify it. If a person contacts us through a nonwritten communication, and that contact relates to a substantive part of this AD, we will summarize the contact and place the summary in the docket. We will consider all comments received by the closing date and may amend the AD in light of those comments.

We are reviewing the writing style we currently use in regulatory documents. We are interested in your comments on whether the style of this document is clear, and your suggestions to improve the clarity of our communications with you. You may get more information about plain language at <http://www.plainlanguage.gov>.

Regulatory Findings

We have determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that the regulation:

1. Is not a "significant regulatory action" under Executive Order 12866;
2. Is not a "significant rule" under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and
3. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

We prepared a summary of the costs to comply with this AD and placed it in the AD Docket. You may get a copy of this summary by sending a request to us at the address listed under ADDRESSES. Include "AD Docket No. 2003-NE-06-AD" in your request.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Safety.

Adoption of the Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration amends part 39 of the Federal Aviation Regulations (14 CFR part 39) as follows:

PART 39–AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive:

AIRWORTHINESS DIRECTIVE

Aircraft Certification Service
Washington, DC



U.S. Department
of Transportation
**Federal Aviation
Administration**

We post ADs on the internet at "www.faa.gov"

The following Airworthiness Directive issued by the Federal Aviation Administration in accordance with the provisions of Title 14 of the Code of Federal Regulations (14 CFR) part 39, applies to an aircraft model of which our records indicate you may be the registered owner. Airworthiness Directives affect aviation safety and are regulations which require immediate attention. You are cautioned that no person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements of the Airworthiness Directive (reference 14 CFR part 39, subpart 39.3).

**Federal Aviation Administration (FAA)
Airworthiness Directive (AD) 2003-08-01
Docket No. 2003-NE-06, Amendment 39-13112
Rolls-Royce Deutschland Ltd. & Co KG**

**Subject: Initial and Repetitive Visual Inspections of Low Pressure (LP) Turbine Stage 2 Rotor
Discs and LP Turbine Stage 3 Rotor Discs**

Effective Date

(a) This AD becomes effective May 20, 2003.

Affected ADs

(b) None.

Applicability

(c) This AD is applicable to Rolls-Royce Deutschland Ltd. & Co KG (RRD) Model Tay 650-15 turbofan engines with low pressure (LP) turbine stage 2 rotor discs, part number (P/N) JR32319, and LP turbine stage 3 rotor discs, P/N JR32320A, that have a serial number (SN) listed in Table 1 of this AD. These engines are installed on, but not limited to Fokker F.28 Mark 0100 airplanes. Table 1 follows:

TABLE 1.—DISC SNS

Last known engine SN	LP turbine stage 2 rotor disc, part No. JR32319, SNs	LP turbine stage 3 rotor disc, part No. JR32320A, SNs
17251	EETM1355	DETM1853/A
17255	DETM19039	DETM19007
17256	SETM11283	SETM15065
17273	PETM718	DETM14896/A
17275	DETM17343	DETM17546
17280	EETM1808	SETM14410
17281	DETM19036	DETM18999
17282	EETM2163	DETM3703/A
17300	SETM12109	SETM11379
17301	DETM18772	DETM18348
17327	EETM2510	DETM15404/A
17332	SETM20088	SETM21297

17365	SETM15166	SETM15188
17393	DETM17083	DETM16860
17437	EETM19304	DETM19008
17563	EETM4414	DETM15583/A
17618	EETM5010	DETM9588/A

Unsafe Condition

(d) This AD was prompted by reports of excessive corrosion found during LP turbine stage 2 rotor disc and LP turbine stage 3 rotor disc inspection. The actions specified in this AD are intended to prevent uncontained LP turbine stage 2 rotor disc or LP turbine stage 3 rotor disc failure due to excessive corrosion, and damage to the airplane.

Compliance

(e) Compliance with this AD is required as indicated, unless already done.

Visual Inspections

(f) Perform an initial visual inspection of the LP turbine stage 2 rotor disc and LP turbine stage 3 rotor disc for corrosion within 11,700 cycles-in-service (CIS) after the effective date of this AD. Information on performing visual inspections can be found in RRD engine manual task 72-52-23-200-000 and task 72-52-24-200-000 respectively.

Discs That Fail Inspection

(g) Before further flight, do the following for discs that fail inspection:

(1) Replace any LP turbine stage 2 rotor discs and LP turbine stage 3 rotor discs found with corrosion pits beyond repairable limits. Information on repairable limits may be found in RRD Engine Manual Task 72-52-23-200-000 and Task 72-52-24-200-000 respectively.

(2) Repair any LP turbine stage 2 rotor discs and LP turbine stage 3 rotor discs found with corrosion pits within repairable limits. Information on repairable limits may be found in RRD Engine Manual Task 72-52-23-200-000 and Task 72-52-24-200-000 respectively.

Repetitive Visual Inspections

(h) Perform repetitive visual inspections of the LP turbine stage 2 rotor disc and LP turbine stage 3 rotor disc for corrosion within every 11,700 cycles-since-last inspection. Information on performing visual inspections can be found in RRD Engine Manual Task 72-52-23-200-000 and Task 72-52-24-200-000 respectively.

(i) Disposition discs that fail inspection as specified in paragraph (g) of this AD.

Alternative Methods of Compliance

(j) The Manager, Engine Certification Office, FAA, is authorized to approve alternative methods of compliance for this AD in accordance with 14 CFR 39.19.

Material Incorporated by Reference

(k) None.

Related Information

(l) LBA airworthiness directive 2002-287, dated October 17, 2002, also addresses the subject of this AD.

Issued in Burlington, Massachusetts, on April 7, 2003.

Jay J. Pardee,

Manager, Engine and Propeller Directorate, Aircraft Certification Service.

[FR Doc. 03-9017 Filed 4-14-03; 8:45 am]

BILLING CODE 4910-13-P